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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,543	01/12/2001	Walter Horburger	HF-54	1176

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Friedrich Kueffner
317 Madison Avenue
Rm 910
New York, NY 10017-5246

EXAMINER

VERBITSKY, GAIL KAPLAN

ART UNIT	PAPER NUMBER
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2859

DATE MAILED: 03/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/759,543

Applicant(s)

HORBURGER ET AL.

Examiner

Gail Verbitsky

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is finally rejected under 35 U.S.C. 103(a) as being unpatentable over Goss in view of Patten.

Goss discloses in Fig. 2 a spirit level comprising a bubble level (vial) 10, a bubble 46, a recess and a housing (level body) 54.

Goss does not explicitly disclose a foam metal to make the level body.

Patten teaches how to make a foam metal material and states that articles made of this material are light weighted, have high damping coefficient (durable), and high stiffness-to-density ratio, therefore a material of a predetermined density can be made.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the level/ article, disclosed by Goss of a foamed metal, as taught by Patten, so as to have a light weighted, durable material and to provide the user with a light weighted level, in order to allow the user to easily hold it and set it to the surface of interest.

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3. Claims 1-2 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Goss in view of Brungs.

Goss discloses in Fig. 2 a spirit level comprising a bubble level (vial) 10, a bubble 46, a recess and a housing (level body) 54.

Goss does not explicitly disclose a foam metal/ aluminum to make the level body.

Brungs teaches how to make a foam aluminum matrix and states that articles made of this material have low/ light weight.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the level/ article disclosed by Goss of a foamed aluminum, as taught by Brungs, so as to have a light weighted, durable material so as to provide a user with a light weighted level, in order to allow the user to easily hold it and set it to the surface of interest.

4. Claims 1-3, 5 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Goss in view of Niebylski.

Goss discloses in Fig. 2 a spirit level comprising a bubble level (vial) 10, a bubble 46, a recess and a housing (level body) 54.

Goss does not explicitly disclose a coated foamed aluminum material to make the level body.

Niebylski suggests to make a coated foam aluminum article. Niebylski states that this material is durable (can withstand high impaction energy).

For claim 3: the article can be coated with a plastic material. It is inherent, that the plastic material has higher density (hardly porous) than the foamed material.

For claim 5: the article can be coated (forming skin) by adhesion of a metal foil. It is inherent that the metal foil has higher density/ less porosity than the foamed material.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the level/ article, disclosed by Goss of a coated foamed aluminum, as taught by Niebyski, so as to have a light weighted, durable level protected by a less porous (dense) material from possible contamination, in order to allow the user to easily hold, and the article can be used in a harsh environment.

5. Claim 3 is finally rejected under 35 U.S.C. 103(a) as being unpatentable over Goss in view of Richardson.

Goss discloses in Fig. 2 a spirit level comprising a bubble level (vial) 10, a bubble 46, a recess and a housing (level body) 54.

Goss does not explicitly disclose a synthetic non/ less porous coating, as stated in claim 3.

Richardson teaches that a porous material structure can be covered with a non-porous impermeable plastic/ synthetic material (col. 5, lines 41-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the level/ article disclosed by Goss of a synthetic coated foamed aluminum, as taught by Richardson, so as to have a light weighted, durable level less susceptible to the harsh environment with the porous structure

protected inside from possible contamination and moisture, in order to maintain accuracy and longevity of the device.

6. Claim 4 is finally rejected under 35 U.S.C. 103(a) as being unpatentable over Goss and Patten as applied to claim 1 above, and further in view of Provi.

Goss and Patten disclose the device as stated above in paragraph 2.

They do not disclose recesses (plurality of recesses) in the level body.

Provi discloses in Fig. 1 two recesses for vials (bubbles) 48.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by Goss and Patten, so as to have two (plurality) recesses for bubbles, as taught by Provi, in order to provide the user with a plurality of bubbles, and thus, more accurate level indication.

Response to Arguments

7. Applicant's arguments filed on December 08, 2003 have been fully considered but they are not persuasive.

Applicant states that Goss does not discuss the particular material to make a level housing, and there is no teaching to use a foamed material. This argument is not persuasive, because, although Goss does not describe the material, it is obvious, that some kind of material is being used to make the level body of Goss. Goss does not disclose a foamed material, however, the combination of Goss and Patten does. Applicant states that it would not be obvious to combine Goss and Patten. This argument is not persuasive because: the Examiner recognizes that there should be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. In re Nomiya, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. the test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In re McLaughlin, 170 USPQ 209 (CCPA 1971. in this case, the secondary reference uses a light material to make an article. References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. In re Bozek, 163 USPQ 545 (CCPA) 1969.

Applicant argues about the particular weights of porous and non-porous materials and states that the foamed material of the present invention does not make the device of the present invention lighter. This argument is not persuasive, because it is known from physics that if to compare two articles of the same volume/ shape but made of materials of different density (porosity), the article made of the material of higher density will weigh more, and the article made of the less dense material will be lighter. Thus, an article made of a foamed/ porous aluminum is lighter than the article made of a non-porous, dense aluminum.

Applicant states that a level body made of a foamed metal is subject to uniform shrinkage (during manufacturing), while the plastic material coating does not shrink uniformly (Richardson). This argument is not persuasive, because the limitation the applicant relies on (the particular manufacturing process) is not stated in the claims. It is the claims that define the claimed invention, and it is claims, not specifications that are anticipated or unpatentable. Constant v. Advanced Micro-Devices, Inc. 7 USPQ 1064.

Applicant states that there is no suggestion to combine Goss and Brungs, Goss and Niebylski and Goss and Richardson.

This argument is not persuasive because, the Examiner recognizes that there should be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. In re Nomiva, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. the test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In re McLaughlin, 170 USPQ 209 (CCPA 1971. in this case, the secondary references teach a light material to make an article. References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. In re Bozek, 163 USPQ 545 (CCPA) 1969.

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices and methods.

Any inquiry concerning this communication should be directed to the Examiner Verbitsky who can be reached at (571) 272-2253 Monday through Friday 8:00 to 4:00 ET.

GKV

Gail Verbitsky

Primary Patent Examiner, TC 2800



March 04, 2004